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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,514	10/14/2005	Maki Oshima	HOK-0288	7467

7590 10/03/2007
Rader, Fishman & Grauer, PLLC
1233 20th Street, N.W. Suite 501
Washington, DE 20036

EXAMINER

MATOCHIK, THOMAS L

ART UNIT	PAPER NUMBER
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1709

MAIL DATE	DELIVERY MODE
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10/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,514

Applicant(s)

OSHIMA ET AL.

Examiner

Thomas Matochik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/14/2005, 9/19/2007.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et.al (US 6,296,940) in view of Oda et.al (JP 2002069750).

Regarding claim 1: Ito teaches a composition comprising an epoxy resin (A), a curing agent (B) and a phosphorous atom containing polyester (C) obtained by condensing a phosphorous compound containing a P-H linkage with an alcoholic hydroxyl group (abstract). Ito further teaches the phosphorous containing reactant shown in fig. 1 (col. 3, line 12):

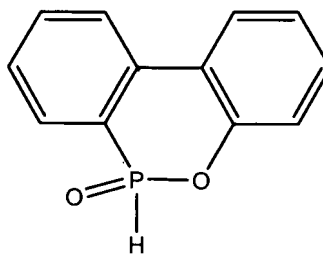


fig. 1

9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide

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Ito does not teach the specific phosphorous compound cited, fig. 2, cited in the instant.

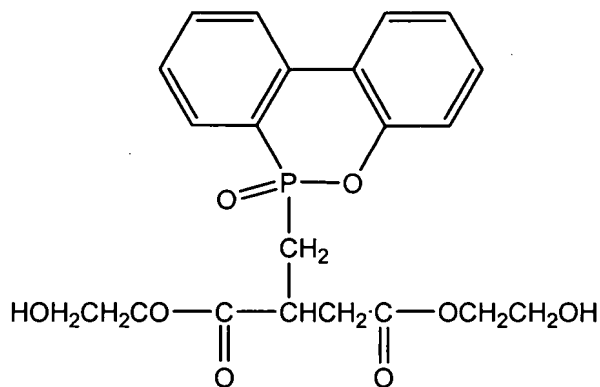


fig. 2

However, Oda teaches the structure shown in fig. 2 as being an excellent fire retarding compound (claim 2, formula 2). Ito and Oda are analogous art since they are both from the same field of endeavor, namely fire retardant compounds and compositions. One of ordinary skill in the art, at the time the invention was made would have been motivated to combine the teachings of Oda with those of Ito to obtain improved structural stability.

Regarding claim 2: Ito teaches a curing agent (B) containing a Novolac resin (col. 2, lines 62-64).

Regarding claims 3 and 4: Ito teaches an epoxy resin containing no halogens (col. 2, lines 25-30). Ito is silent on the epoxy equivalents, however the resins disclosed are the same as cited in the instant therefore one would expect the epoxy equivalent values would be substantially similar.

Regarding claims 5-8: Ito teaches a prepreg by varnishing the composition, dissolved in a solvent, onto a substrate, dried to form a metal clad, laminated sheet which is placed in a printed circuit board (col. 4, lines 21-28).

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Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Matochik whose telephone number is 571-270-3291. The examiner can normally be reached on Monday-Friday 7:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TLM
9/27/2007


MARK EASHOO, PH.D.
SUPERVISORY PATENT EXAMINER
01/04/07